Intended Recipient	Project Name	Purpose	Location	Amount Requested by Organization	Justification (provided by the intended recipient)
Advanced Analytical Technologies, Inc.	Portable Rapid Bacterial Warfare Detection Unit	to detect biological contamination in water by developing a fast, portable detection device	Ames	$8,500,000	This technology provides the rapid response needed to protect troops from exposure to harmful biological agents.
Alcoa Davenport Works and Alcoa Technical Center	Advanced Aerospace Material Technologies for Modernizing the Aging Fleet	to develop, demonstrate, and implement advanced material design, processes, and technologies to reduce cost and weight, to improve fatigue and corrosion performance, and to extend the lifespan of legacy aircraft platforms	Davenport	$9,500,000	The requested funding will be utilized to support Air Force fleet sustainment and extend the lifespan of legacy platforms through development, demonstration, and implementation of advanced material design, processes, and technologies to reduce cost and improve performance with the Air Force.
Athena GTX	Wireless Medical Monitoring System (WiMed)	to complete testing and initial fielding of wireless medical monitoring technologies	Des Moines	$3,000,000	WiMed™ has met or exceeded all technical development milestones to date. Funds allow for continued product spin-offs on applications derived directly from the battlefield. This request completes development and testing and focuses on further applications of traumatic brain injury and post traumatic stress disorder.
Bio-NRG, LLC	Bio-Diesel Algae Fuel Research, Development & Production	to support research and development on algae-to-oil soybean-based production to provide jet fuel to the military, meeting the Air Force's goal of 50 percent domestic energy supplies by 2016.	Mount Pleasant	$3,000,000	This funding will be used to enhance and accelerate the research and development necessary to scale-up algae-to-oil production using locally/domestically produced soybeans. The use of alternative energy sources will contribute to lower costs to taxpayers, increased fuel supply security, and reduced reliance on foreign and/or potentially unreliable suppliers.
BioProtection Systems Corporation	Anti-Viral Vaccine Development	to develop vaccines to protect Americans from chemical or biological attacks	Ames	$6,120,000	The United States must build both the ability to withstand pathogen attack – a fundamental and defensive aspect of deterrence – as well as improve our resiliency beyond an attack.

Copper Development Association in association with PMX Industries, Inc.	Antimicrobial Army Mobile Medical Facilities	to develop and construct a full-scale adaptation of an Army mobile medical treatment facility, utilizing equipment proven to be antimicrobial to reduce war fighter susceptibility to opportunistic infections acquired in the military theater and improve force readiness.	Cedar Rapids	$4,100,000	Both combat-related and noncombat infections pose serious threats to the success of American military forces by decreasing productivity and forces strength, as well as increasing healthcare costs. This project will demonstrate the effectiveness of copper to inactivate dangerous pathogens in military healthcare settings and other high-risk facilities and to reduce nosocomial infections.
Des Moines University	Iowa Simulation Center for Patient Safety and Clinics Skills Enhanced Training of Iowa National Guard and Army Reserve	to support trauma and emergency training for Iowa National Guard and Army reserve units	Des Moines	$1,005,000	Federal funding would enable continued innovative and effective in-state training on emergency medical response for Iowa's Army National Guard and Army Reserve units, preparing these units for deployment with the most current medical knowledge.
Eaton Corporation	Advanced Digital Hydraulic Hybrid Drive System	to address key technical challenges for series hybrid hydraulics to be applied to and provide optimal benefits for Army tactical wheeled vehicles.	Spencer, Iowa, Eden Prairie, Minn.	$1,200,000	This program will address both the critical fuel efficiency and weight/volume issues faced by military vehicles, targeting 50% improvement in fuel efficiency and dramatically reducing the weight of the drive system.
Goodrich Corporation	Advanced Combustion Control System for Military Aircraft	to develop, integrate, and test the Advanced Combustion Control System which consists of a fuel injection system incorporating dynamic pressure sensors, digital flame detectors, smart fuel injectors, and drive electronics packaged with a Goodrich fuel modulating valve	West Des Moines	$7,200,000	Advanced Combustion Control System technology enables lean direct injection combustion technologies which can reduce gas turbine engine pollutant emissions by 70 percent while providing a 1% reduction in fuel burn to the Air Force for a savings of approximately $56 million/year.
Innovative Energy Solutions	Green Technology for Harnessing Energy from Hazardous Waste Hydrocarbons	to conduct research and development of technology to convert waste hydrocarbon based materials such as plastic, used tires, shingles, waste oil, used or virgin vegetable oil and other feedstock directly into high quality diesel fuel.	Ames	$3,200,000	The military has a current need for technologies that meet "zero footprint" goals. Waste Hydrocarbon to Fuel (WHc2F) can convert waste hydrocarbon based materials such as plastic, used tires, shingles, waste oil, used or virgin vegetable oil and other feedstock directly into high quality diesel fuel. Funding will help prove the scalability and also to evolve the processing methodology from batch to continuous.

Intermec Technologies Corporation	Navy AIT Logistics Modernization Initiative	to procure mobile automatic identification technology to increase supply accuracy and visibility, reduce loss and spoilage expenses allowing order to actual needs and enable reduced supply manning	Cedar Rapids	$6,000,000	The project continues the enhancement of the Naval Supply Systems Command's new logistics system with mobile AIT/pRFID technologies and equipment, providing the Navy increased supply visibility and accuracy, reduced losses and spoilage, the ability to order-to-actual-need, and enabling reduced supply manning.
Iowa Army Ammunition Plant	EPACT Utility Tracking, Iowa Army Ammunition Plant	to install a central real time energy monitoring system and installation of advanced metering devices, including necessary wiring, conduit, at all significant active buildings at the Iowa Army Ammunition Plant	Middletown	$2,380,000	The Iowa Army Ammunition Plant is a government-owned contractor-operated (GOCO) facility. A significant portion of the O&M cost is directly related to energy costs. To make substantial reductions in utility costs, monitoring usage at individual buildings is necessary.
Iowa National Guard/MCTC	Midwest Counterdrug Training Center	to provide counterdrug training for law enforcement, demand reduction professionals and community based coalitions	Johnston	$7,000,000	The Midwest Counterdrug Training Center provides the highest quality training available at no cost to law enforcement and others engaged in the fight against drug trafficking and substance abuse.
Iowa State University	AERI: Aircraft Evaluation Readiness Initiative	to develop methods to support the cost-effective inspection of aging military airplanes and engines, which reduces the need for procurement of new systems.	Ames	$3,000,000	National security relies on the readiness of the US Air Force fleet. The AERI: Aircraft Evaluation Readiness Initiative is developing methods to support the cost-effective inspection of aging military airplanes and engines, which reduces the need for procurement of new systems.
Iowa State University	Multi-Utility Materials for Army Future Combat Systems	to develop new armor systems for protection of vehicles and of soldiers, including both body armor and helmets	Ames	$9,000,000	The U.S. Army is facing rapidly evolving combat requirements. The Multi-Utility Materials for Army Future Combat Systems initiative is supporting the U.S. Army in developing and evaluating weapons and protective armor materials, with emphasis on survivability.
Iowa State University	Advanced Live, Virtual, and Constructive Training Systems	to integrate live, virtual, and constructive training environments across multiple locations and fields of operation, including air, ground and maritime	Ames	$4,000,000	Keeping up with the unique demands of urban combat in Afghanistan and elsewhere requires flexible and adaptive training systems that can be modified rapidly and deployed reliably and effectively in the field. These systems, when proven effective, increase troop safety.

Iowa State University	New Vaccines for Central Nervous System Disorders	to develop novel vaccines for central nervous system disorders	Ames	$6,000,000	This novel immunomodulatory nanoscale vaccine design strategy brings together researchers from ISU and UNMC to revolutionize our ability to protect our citizens, military personnel, and livestock from dangerous central nervous system pathogens.
Kingland Systems	GLSC Materiel Information Management Environment	to develop and implement a supply chain management solution for the Air Force	Clear Lake	$4,000,000	Funding will increase Air Force equipment availability and reduce costs associated with maintaining readiness by creating a single, integrated, configuration managed Material Information Management Computer Software Environment that can be used across Air Force communities, including Acquisition, Maintenance, Supply and the war-fighter community.
MediaTech	Emergency Management Staff Trainer Web-based Distributed Learning Courseware	to develop interactive Web-based Distributed Learning courseware in order to prepare emergency management staff personnel with the necessary critical information to enable effective, efficient, and timely management of emergencies	Centerville	$2,000,000	The National Guard Bureau is seeking high quality, cost effective training for the young men and women who staff each state's Joint Operation Center (JOC), charged with planning, directing, monitoring and assessing the state's response to natural and manmade disasters.
Orthocare Innovations Foundation	Rehabilitation Technology Transition Center	to prepare revolutionary prosthetics technology for manufacture and distribution, making it available to wounded warriors, veterans and civilian amputees who need it.	Waterloo	$9,000,000	The Rehabilitation Technology Transition Center will give wounded warriors life-changing prosthetics to restore the highest possible quality of life.
Rock Island Arsenal	Quad Cities Manufacturing Laboratory	to equip the manufacturing facility and support research in titanium alloys and advanced composites	Macomb and Rock Island, Ill. and Cedar Falls, Iowa	$10,000,000	These manufacturing capabilities will be unique, positioning QCML, RIA, and the region to be world-class manufacturing entities. RIA will re-emerge as a manufacturing leader within the DoD, QCML will foster regional industrial economic growth, and partnering universities will benefit greatly.
Rock Island Arsenal	Rock Island Arsenal, Building #299 Roof Replacement & Restoration (Phase V)	to restore and replace the roof of building #299 to ensure a safe, healthy and more energy efficient work environment at the Arsenal	Rock Island, Ill.	$6,000,000	The continued funding of this project will ensure a mission-critical RIA facility provides a safe, healthy and more energy efficient work environment for its employees.

Rock Island Arsenal	Arsenal Support Program Initiative	to develop commercial use for underutilized facilities	Rock Island, Ill.	$4,000,000	The goals of ASPI are to encourage commercial firms to utilize and invest in Rock Island Arsenal (RIA) facilities to reduce product and ownership costs (overhead). Additionally, ASPI creates jobs and contributes to the increased use of the military industrial base's critical skill sets, thereby enhancing overall readiness levels.
Rock Island Arsenal	Joint Manufacturing & Technology Center Mini-Rearmament	to manufacture and develop technology to support military forces	Rock Island, Ill.	$6,700,000	The JMTC's one-of-a-kind manufacturing facility supports our military forces worldwide from their industrial base at Rock Island Arsenal. The Joint Manufacturing & Technology Center (JMTC) is the Army's only vertically integrated metal manufacturing facility and the Army's only foundry – the acquisition of cutting edge technology and equipment is essential to meet ever-changing mission requirements.
Rockwell Collins, Inc.	Micro-Defense Advanced GPS Receiver (MicroDAGR)	to increase the functionality of the MicroDAGR to meet the expectations of the war fighter	Coralville	$2,500,000	Planned improvements to the MicroDAGR will ensure the MicroDAGR is more DAGR-like in performance. The new features/capabilities will allow for a more intuitive user interface with additional capabilities that allow the war-fighter to more easily accomplish the mission, and can be accomplished with proper funding by the government.
Rockwell Collins, Inc.	A/MH-6 "Little Bird" Cockpit Avionics Upgrade Development Program	to created an upgraded avionics prototype for the A/MH-6 aircraft, providing enhanced capabilities	Cedar Rapids	$6,000,000	An upgraded avionics prototype for the A/MH-6 aircraft, which will provide advanced capabilities that complement the MH-60 and MH-47 aircraft, must be developed. The technology solutions developed for this aircraft will contribute to other new programs such as the Armed Aerial Scout and Unmanned Aircraft Systems, which will increase the government's return on investment.
Rockwell Collins, Inc.	Low Cost Military GPS Receivers (Title III)	to creat a more affordable and enhanced GPS receiver for the war fighter	Coralville	$8,000,000	The importance of GPS-based products to our war-fighter is recognized. It is apparent that a continued government infusion of capital will lower the cost and enhance the capabilities of a military GPS system and increase the "domestic" capability of producing a military GPS receiver.
Rockwell Collins, Inc.	Cognitive Signal Classifier (CSC) System	to develop and demonstrate a compact and portable system capable of detecting, classifying and reasoning about known and unknown signals.	Cedar Rapids	$2,200,000	It is recognized that a compact and portable system capable of detecting, classifying and reasoning about known and unknown signals is critically needed. The Cognitive Signal Classification (CSC) system will allow for faster analysis and reaction to known and unknown RF threats reducing effective reaction.

The University of Iowa	Epidemiologic Health Survey	to provide medical screenings for Iowa Army Ammunition Plant workers, including education, medical evaluation and treatment advice	Iowa City	$650,000	In 2002, the University of Iowa was tasked with conducting a Congressionally-mandated epidemiologic assessment of the health of DoD contract workers at the Iowa Army Ammunition Plant in Middletown, Iowa. UI developed a study protocol, with oversight from the USACHPPM.
The University of Iowa	Next Generation Manufacturing Technologies Initiative	to develop new technologies and address the common requirement of the Department of Defense, other government agencies and U.S. industry	Iowa City	$4,000,000	US manufacturers continue to face deepening challenges: a prolonged recession, a surge in imports from low wage/high skills countries, a decline in capital investment, and a sharp increase in the cost of doing business. Meeting these challenges is critical to our nation's economic and military security.
University of Northern Iowa	SOAR (Student Online Achievement Resources)	to provide resources to military families who relocate to different states and school districts	Cedar Falls	$8,000,000	SOAR is a resource for military families who relocate to different states and school districts. SOAR provides online assessment and instructional tools that help schools, students, and parents identify academic strengths and weaknesses, and interactive components to address identified skills.
University of Northern Iowa	Spray Technique Analysis and Research for Defense	to train military painters in the proper and efficient application of chemical coatings and other corrosion-preventative materials	Cedar Falls	$1,900,000	This project directly benefits the military by offering significant cost savings, quality improvement and environmental benefits as a result of STAR4Defense training which further increases the safety of our soldiers.